Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

Volume 1, Number 12 | BOSTON, MASSACHUSETTS | September, 1934

The 1934 Fire Prevention Week Poster. This startling design in two colors, greatly enlarged, has been prepared by the N.F.P.A. for use in 1934 Fire Prevention Week campaigns. See back cover for details of ordering a supply.

Fire Prevention Week, 1934

Successful Observance of Week October 7-13 Depends on Making Plans for Campaigns Now

FIRE Prevention Week is the one time when national publicity and local effort centers people's thoughts on fires. It's the time to let your citizens know what the fire department is doing for them during the other fifty-one weeks of the year when the department's services are taken for granted. Put on fire prevention exhibitions. Stage an exhibition drill of the department. Have open house at the fire station. Get the citizens to come down and look at the apparatus, and explain its purpose to them. All this will help when the department

The "After" tableau of a "Before" and "After" exhibit of the hazard to women of cleaning with gasoline in the home, put on by firemen and the state Fire Marshal at the Ohio State Fair.

must go to the people for financial support and for appropriations for needed tools and apparatus.

During this week, October 7 to 13 inclusive, falls the anniversary of the Great Chicago Fire of 1871, and the week is set aside by presidential and royal proclamation as a period in which to campaign to prevent the recurrence of such disasters and to reduce the day-to-day toll of life and property taken by fires.

Under the leadership of the National Fire Protection Association this national and international campaign, covering practically all of North America, has been carried on for nearly twenty years. T. Alfred Fleming, Chairman of the N.F.P.A. Committee on Fire Prevention and Clean-Up Campaign, reports that hundreds of communities are rallying under their fire departments and civic agencies to put on an observance of Fire Prevention Week which will show every citizen just what is expected of him in this campaign.

The time is getting short and plans for Fire Prevention Week must be promptly made to secure an adequate observance. The National Fire Protection Association has prepared a large assortment of publications and posters which are available to assist members and others wishing to arrange local campaigns. These are furnished at cost and local fire departments and fire prevention committees may order supplies best fitted to their needs. Material suitable for newspaper publicity and general education in fire prevention is also available. The entire back page of this issue is devoted to listing this material. Look it over.

Particular attention is called to the Fire Prevention Week Handbook. Every year many successful programs are carried out. The best of these are outlined in that handbook. It will help you plan your campaign.

Here are some of the types of campaigns which volunteer departments have successfully used. You may want to try one or more of them this year.

A "Chimney and Roof" Campaign

If you count them up you will find that the principal cause of fires in buildings is defective chimneys. Another important cause is wooden shingle roofs. Get out your department records and put the statistics in the paper. Then during Fire Prevention Week, divide up the area served by your company and assign your men in groups of two to a district. The district may be one or more blocks of the town or village or any convenient area. Some time during Fire Prevention Week these men will arrange to get around to every building and have a look at every chimney and roof from the outside at least. They will make a list of the apparent condition of all chimneys and note whether a roof is a shingle roof, or a roof of fire retardant construction.

They will take particular note of the following:

(1) Chimney out of plumb.

(2) Chimney obviously in bad condition, with mortar fallen from between the bricks in the part visible above the roof.

(3) Chimney with walls only four inches thick and without a lining.

THIS IS FIRE PREVENTION WEEK
LOOK AFTER YOUR FURNACE & PIPES BEFORE STARTING FIRES.
START YOUR CAMPAIGN AGAINST FIRE TODAY.

Spare and obsolete fire apparatus with large painted signs on the sides attracts considerable attention when driven through the streets.

(4) Chimney supported on brackets (either wood or metal) and not built from the ground up.

If the owner invites you inside to look at the chimney, you can also observe whether there are any unplugged flue holes and whether or not the chimney is dirty.

If any of these conditions are noted they may be politely called to the owner's attention. Tell him that the check-up on his chimney is a service that the fire department is doing for him so that it won't have to be called there to a fire some cold night. This will make for good will toward the department.

If the roof of his property is wooden shingle (and especially if the shingles are in bad shape) the owner may appreciate having called to his attention the danger of this type of roof in its susceptibility to ignition from small sparks, either from his chimney or from a fire in near-by property.

The principal feature of such a campaign is to get a list of the chimney and roof hazards. If the opportunity offers to the men making the check-up to approach the owner this may be done as indicated above. The list should be brought back to company headquarters and be gone over at the next meeting of the company. John Jones, a member of the department, will a few days later be going duck-shooting with Bill Smith, one of the persons listed as having a dangerous chimney, and will find a way to bring the matter to Bill Smith's attention without offending him. This sort of thing will be repeated over and over again for every member of the department, and by one means or another dozens of potential hazards will be corrected.

Essay and Poster Contests

One of the easiest ways to enlist the interest of children is to offer prizes for the best essay or poster on a fire prevention subject. The contest can be put on in all the schools as a Fire Prevention Week program. A definite subject for an essay or poster is selected. A winner from each school is picked by the teachers of the school, and where there are several schools a fire department committee may be asked to select a grand prize winner for the whole community. It is usually not difficult to find one or more business men who will contribute appropriate prizes, which need not be expensive. The best essays may be read at a public gathering during the week and winning posters may be put on display in some prominent place.

Booth at the Kansas State Fair. Various types of extinguishers are on the shelves. On the walls are pictures of apparatus and fire hazards, and posters and statistics on fire waste. Note the educational pamphlets for distribution to visitors on the table.

Here's a publicity idea which can be used in any city or town.

General Publicity

The purpose of general publicity on fire prevention is, first, to arouse people to a consciousness of what fire means to them, and, second, to make them have the right attitude toward fire. If people have the right attitude they will be careful and will not do anything that will place themselves or a neighbor in a position to suffer from a fire.

There are hundreds of ways to arouse interest through general publicity. Window displays, posters, pamphlets and newspaper stories may be used. Fire prevention messages have been printed on posters, letterheads, envelopes, restaurant menus, bills, milk bottle caps and many other places as a contribution of business men to fire prevention education.

A list of all the club meetings and gatherings during the week should be made and so far as possible someone assigned to tell the fire prevention story briefly at each of these meetings.

A popular method of getting attention is to place a startling message on a piece of fire apparatus and parade it through the streets. Where this is done old or spare pieces of apparatus should be used so that the fire station is not left empty in case of fire.

Methods of Loading Hose Beds

How to Make the Common Loads—The Advantages and Disadvantages of Each—Choosing the Best Method

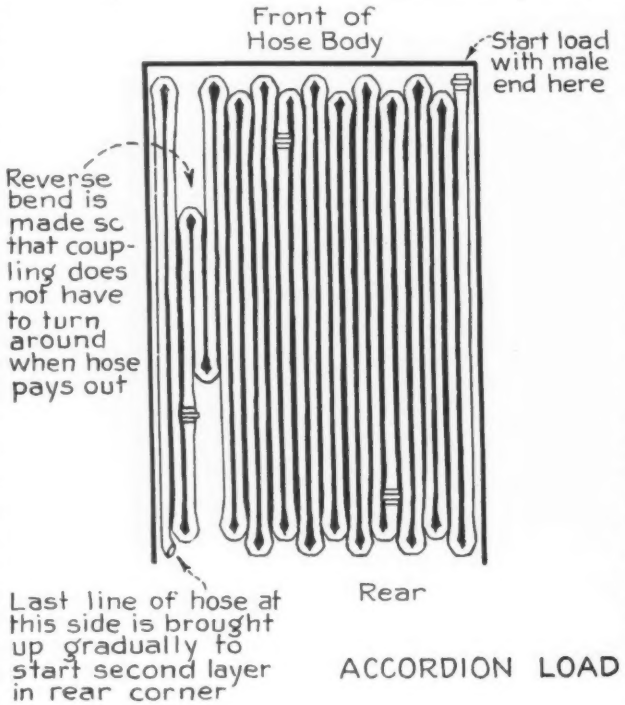
The principal tool of the fire department is the standard 2½-inch hose line. Most pieces of fire apparatus must carry approximately 1,000 feet of this hose, and therefore the method of laying it in the hose bed is important.

The exact arrangement used will, of course, depend upon a number of factors. There is, first, the capacity and arrangement of the particular apparatus. It will also make some difference as to what the company's fire fighting practices may be. For example, if the department has only one pumper and must use this to give adequate pressures at the nozzles, the general department practice is to lay the hose from the fire to the hydrant. If on the other hand it is possible generally to use direct hydrant streams, the department may have the uniform practice of laying from the hydrant to the fire. This practice will determine which way the hose is laid in the hose bed. On the other hand, companies should be prepared to lay either from hydrant to fire or from fire to hydrant. The relative position of the fire and hydrant and the direction from which they are approached by the apparatus and the prevailing hydrant pressures in the locality are important factors. Double-male couplings carried on the apparatus are useful in this connection, because companies cannot always be certain which way they will lay the hose until they arrive upon the scene.

A basic principle of laying hose is to place it so that it will pay out smoothly and without kinking. The hose must therefore be placed in the bed not too tightly, as too great friction between the lengths may cause the line to dump out all in one heap. On the other hand, it is necessary to load the hose snugly enough to prevent its shifting or falling and chafing against the sides and bottom of the bed when rolling over rough roads or streets. The points to consider in loading the hose bed therefore are to get the most hose in the space provided, to have a minimum number of short bends, and in general arrange the hose so that it can be removed in a smooth and speedy manner. Some of the commoner methods of laying hose are described and illustrated following.

Accordion Load

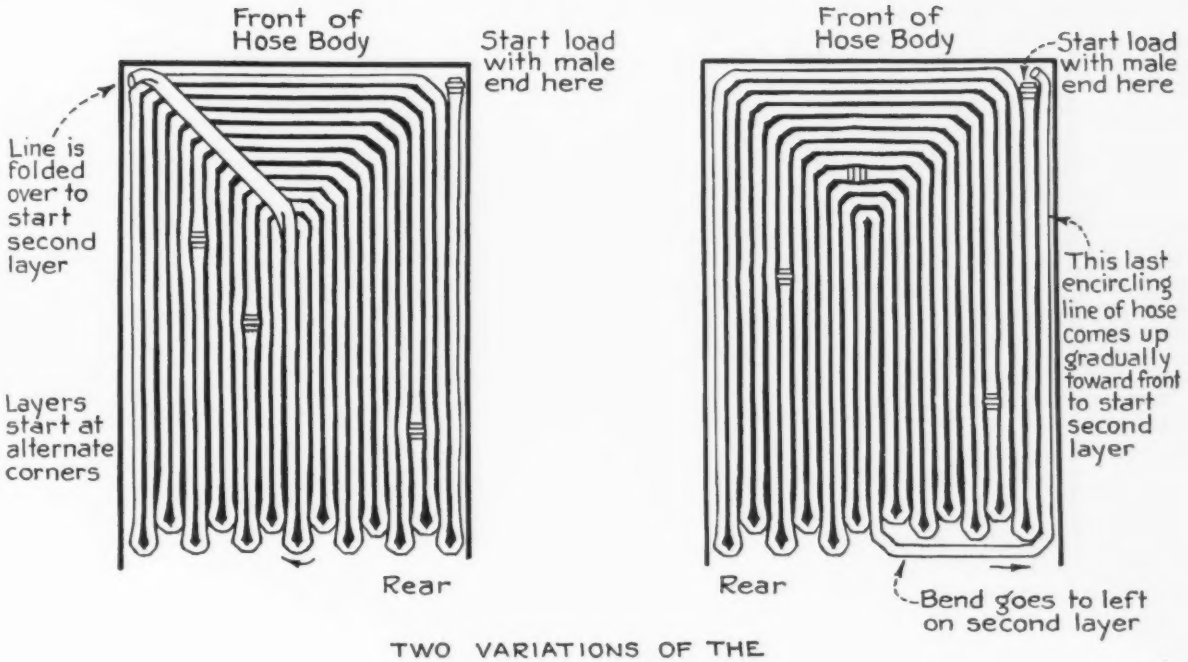
The accordion load sketched below is rather simple to place in the hose bed and is quite generally used. However, all the bends are sharp ones, tending to cramp the rubber lining. This load is started with the male end in the right front corner of the bed and the hose is folded back and forth as shown in the accompanying illustration. Every other bend at each end of the hose bed is made about 8 inches shorter than the preceding one so that the bends will be less sharp and paying out will be made easier. When completing the layer at the side of the bed the last length is gradually raised from front to rear until at the rear it is on top of the first layer.


Front of Hose Body
Start load with male end here
Reverse bend is made so that coupling does not have to turn around when hose pays out
Last line of hose at this side is brought up gradually to start second layer in rear corner
Rear

ACCORDION LOAD

As each layer is completed the remaining space becomes narrower than the length of the coupling, and if the hose is placed in this space in

In the preparation of this article material has been used from such sources as the reports of the Fire Department Instructors' Conference sponsored by the Fire Prevention Department of the Western Actuarial Bureau, and the Official Standard Drill Manual of the Washington State Firemen's Association prepared by Battalion Chief Robert B. Rogers of Seattle. Additional helpful material and comment has been received from R. B. Criswell, Fire Department Instructor, Ohio Inspection Bureau, Columbus, Ohio; Henry Haddock, Assistant Chief, Fire Department, Lynn, Massachusetts; and J. Ray Pence, Chief, Fire Department, Stillwater, Oklahoma.


Front of Hose Body
Start load with male end here
Line is folded over to start second layer
Layers start at alternate corners
Rear
Front of Hose Body
Start load with male end here
This last encircling line of hose comes up gradually toward front to start second layer
Rear
Bend goes to left on second layer

TWO VARIATIONS OF THE HORSESHOE OR U-LOAD

such a manner that the coupling will have to turn around in paying out it will jam. To avoid this, a small reverse bend may be made at the coupling as shown so that the coupling will lie in a place where it does not have to turn around in order to pay out. This device may also be used at other couplings to avoid the placing of two couplings in one layer immediately opposite each other. Otherwise, hose may wedge tightly.

Horseshoe or U Load

One form of this load is shown at the left of the sketch above. It is started with the male at the right front corner of the bed. The hose is laid around the inside of the bed as shown. Every other fold at the rear of the bed is made about 8 inches shorter to make the bends less sharp and to make paying out easier. The layer finishes in the center, from which the line is carried diagonally over the bends in the left front corner. Making a left hand bend in this corner the second layer is begun. On finishing the second layer, the diagonal will be in the right front corner and the third layer will be begun in the same corner as the first layer. An objection to this load is that in bringing the hose over the top of all the bends, in order to start the next layer, raised places are made in the front corners and the hose is crushed between layers.

Another form of the horseshoe or U load is shown at the right in the sketch above. It is started in the right front corner of the bed as indicated. The hose is laid around the inside of the bed and alternate rear folds are made shorter as in the load just described. The rear bends on the right half of the bed should be about 2 inches shorter than those on the left. The end of the first layer is led from the center around the ends of the right half and tucked between the hose and the right side of the bed. It is raised gradually until reaching the right front corner. Here the second layer is begun by following the inside of the bed. This time the rear bends on the left half of the bed are made shorter to allow room for bringing the end of the second layer around those ends to start the third layer. A disadvantage of this load is that a kink may form at the rear corner at the time of beginning to pay out another layer.

Flat Loads

The flat load consists of folding the hose back and forth lengthwise in the hose bed with the flat edge against the bottom instead of laying on the edge as in the other methods. This method has several disadvantages and is not frequently used for full-width hose beds. The weight of the hose may cause the bottom layers of hose to break the rubber lining at the bends. If loaded in tiers, adjacent tiers may fall over into the space being unloaded and tangle the hose.

However, in narrow spaces for laying hose, such as when only part of the bed is used, this method may be preferred because more hose can be placed in the given space. Hose is sometimes laid flat by building a course at a time across the bed instead of building up one tier at a time.

Hose reels or chemical hose baskets on the top of the body may make the laying of hose on its edges more difficult than laying it flat.

Doughnut Rolls and Skid Loads

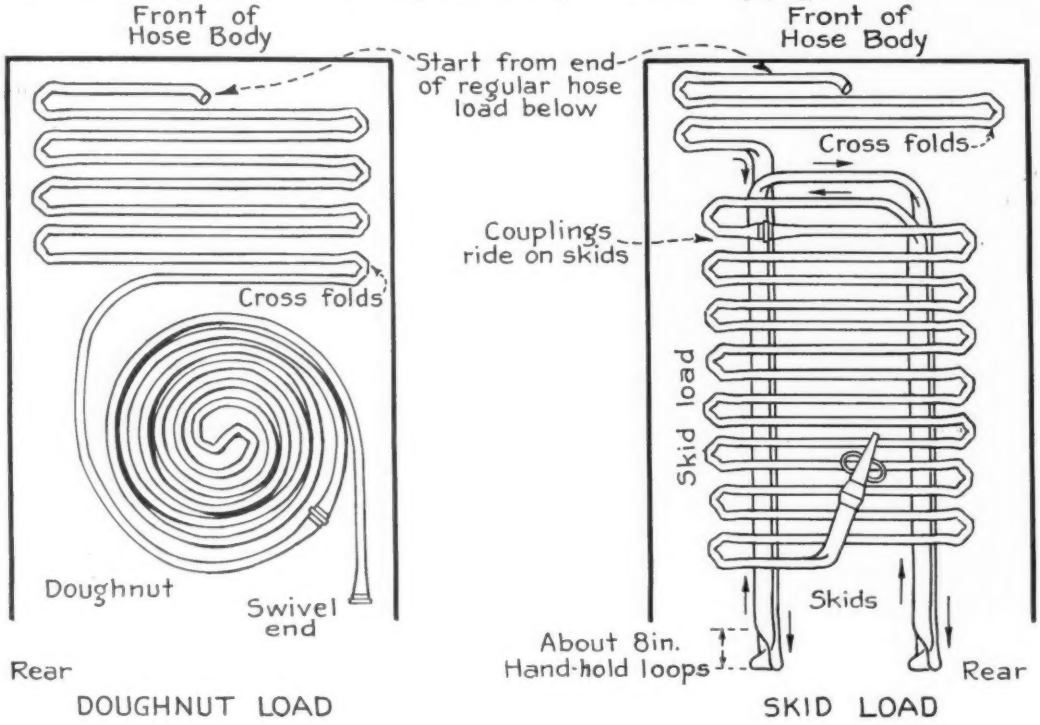
Two methods devised for placing additional hose on the top of regular hose loads to provide slack hose for the hydrant or nozzle man are the doughnut load and the skid load. These loads are shown in the accompanying sketches.

A section of hose rolled in the shape of a doughnut may serve useful purposes. It may easily and quickly be picked up and carried when an extra section is needed such as for replacing a burst section or to add to the length of the line. Spare hose rolled in this manner makes reloading easier. Doughnut rolls may also be placed on the running board for use in making short lays quickly.

The doughnut roll is started with a section lying flat on the ground and carrying the male end over and placing it on top of the hose about 4 feet from the swivel end. One man then rolls the loop end while another guides the slack hose for rolling. The center of the hose should not be made too tight because of possible cramp breakage of the rubber lining and to allow space for carrying. Care should be taken in making the roll that the male coupling threads do not cut the hose.

When laying from hydrant to fire the doughnut roll may be used for the first section off the truck, giving the hydrant man enough free hose to make his hydrant. The sketch on the left shows a doughnut roll and cross folds on the top of a regular load. Another reason for using this load may be to put on an additional 50 or 100 feet of hose which could not otherwise be placed on the bed. When placing this load care should be taken that the roll will come off free and not catch between hose loops or on coupling lugs.

The skid load is useful in making lays from fire to hydrant. It is placed on top of the regular load and made with 125 to 150 feet of hose. The top layer upon which the skid is placed should be level and free from protruding lugs. Some departments prefer to place the top layer across the bed without using skids, but this may not give the nozzle man sufficient free hose and there is possibility of the hose catching on couplings when paying out.



Two methods of placing additional hose on top of hose beds and providing slack hose for the hydrant or nozzle man.

The skid load is started at the front of the hose bed from the end of the regular hose load below. First, several cross folds are made as shown in the preceding sketch on the right. Then a pair of skids are made from the hose by laying the hose flat to the rear of the bed where an 8-inch overhanging hand-hold loop is made by bending the hose back on itself and giving it a half turn. Then laying the hose in a similar manner, the second skid is made. Beginning toward the front, several cross folds are made on the skids. There should be plenty of clearance on the sides, and couplings should ride on the skids. Finally, the nozzle is placed on the folds. When the truck stops at the fire, the skid load is pulled off and the nozzle man has over 100 feet of free hose readily available. The weight of the skid load on the ground unloads other hose as the truck proceeds to the hydrant.

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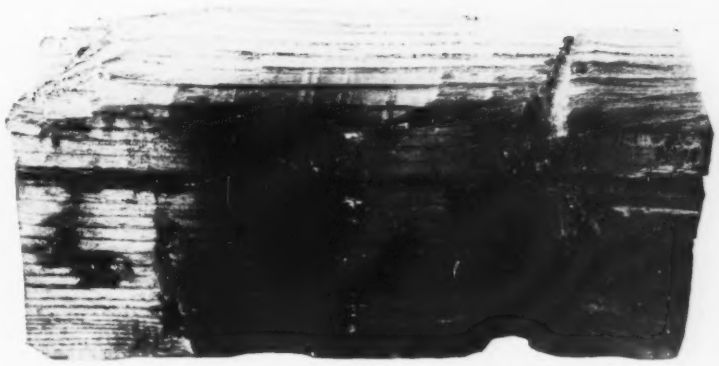
Low Temperature Ignition of Wood

Ordinarly, temperatures of 500° F. or higher are required to ignite wood, but under some conditions wood can be ignited at not much higher than 200°. This is probably the cause of a good many fires of mysterious origin.

Long continued heat causes changes in wood which after a period of years may result in ignition from the heat of an ordinary steam pipe at around 225° or even lower. What happens is the formation of a charcoal-like substance which ignites at a much lower temperature than wood or perhaps ignites spontaneously. There are a number of cases on record where it has been definitely proved that fires have been caused by ordinary steam pipes in contact with wood over a long period of years, and there are probably thousands of other cases of fires starting around chimneys, stoves or pipes where the fire is not due to any spark or flame escaping through a crack, but simply to the effect of long continued, relatively moderate heat.



Photograph of a wooden support ignited by contact with steam pipes.

The way to avoid such fires, of course, is to have ample clearance between woodwork and any source of heat. A safe rule is never to allow any woodwork to get too hot to touch comfortably.

The danger of fire from this cause is greater, of course, in places where air cannot circulate about the wood freely or where there is no insulation between the source of heat and the wood. Firemen when inspecting buildings should see that there is plenty of air space to carry off the heat and prevent the charring of wood close by.

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Farm Fire Prevention

The majority of farm fires are due to seven causes—all largely preventable. Fire Prevention Week should be the occasion to emphasize these causes and secure action to eliminate or reduce them as far as possible. In approximate order of importance, they are:

1. *Lightning.* Provide all buildings with proper lightning protection equipment. Livestock can be protected by grounding at reasonable intervals all wire fences enclosing pastures or yards.

2. *Chimneys and defective heating apparatus.* Rebuild all defective chimneys and see that all heating apparatus is properly installed. Keep chimneys, flues, stoves, etc., clean. Set stoves on substantial bases, well away from floors, woodwork and walls. Smoke pipes should be short and well away from combustible materials. Put ashes in metal cans.

3. *Matches and smoking.* Keep farm premises clean and tidy, and build of incombustible materials as far as possible. Allow no smoking in barns. Tidy conditions greatly reduce the chance that a discarded cigarette or match may start a fire.

4. *Wooden roofs.* Use fire-resistive roofing. Sparks on wooden shingle roofs from bonfires, chimneys, locomotives, forest or other fires (often at considerable distance), may cause the complete destruction of farm buildings.

5. *Spontaneous ignition.* Thoroughly cure hay, pea vines and other roughage before stacking in barns. Do not allow horse manure to accumulate in large piles in stables or against farm buildings.

6. *Gasoline and kerosene.* Provide proper facilities for storage and handling of gasoline and kerosene. Do not use gasoline for home dry-cleaning, or kerosene for starting fires.

7. *Electricity.* Make sure all wiring and electric devices are properly installed. Watch for worn insulation.

In addition to reducing specific fire hazards, every farm should be equipped with first aid fire appliances, such as chemical extinguishers, pump tanks and water pails.

Volunteer Firemen

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Published by the National Fire Protection Association, a voluntary non-profit organization, 60 Batterymarch Street, Boston, Massachusetts, U. S. A. (Copyright 1934.)

Volume 1 **September, 1934** Number 12

VOLUNTEER FIREMEN One Year Old This issue of VOLUNTEER FIREMEN completes the first year of the magazine. The first issue came out last October. Until that time there had never been a national organization of volunteer firemen to which volunteers could go for help or interchange their experiences.

The organization of the Volunteer Firemen's Section was largely due to the efforts of the late William Draper Brinckloe, a prominent volunteer fireman of Maryland, who pointed out that the National Fire Protection Association could extend its field of usefulness if it provided the same valuable information to volunteer firemen of the country that it was providing for the paid departments, state fire marshals and the large army of its members interested in the various phases of fire protection and prevention. The five-point program or platform set forth as a guide for the Volunteer Firemen's Section is:

1. The interchange of experience among volunteer fire departments.
2. The development of a medium for broadcasting new developments and new ideas of benefit to volunteer fire departments.
3. The development of standard practices and methods for fire fighting by volunteer fire departments.
4. The promotion of fire prevention in rural districts.
5. The promotion of the organization of new volunteer fire companies and extension of the service of existing companies where necessary.

The principal means of carrying out this program has been through this magazine. Letters are received every day vouching for the usefulness of VOLUNTEER FIREMEN as a source of valuable information for all firemen. Those who have read the magazine from the beginning have noticed the improvements made from time to time in the material presented, the type and paper, and the general make-up.

An average of over 500 new members per month since the organization of the Volunteer Firemen's Section (some months it has been over 1,000) is proof of how well this undertaking has been accepted throughout the United States and Canada. Such a record should be the envy of most national organizations and their publications.

Fire Department Drill Manual A new drill manual for fire departments has been compiled by Robert B. Rogers, Battalion Chief of the Seattle Fire Department, and published through the courtesy of the Northwestern Mutual Fire Association (member N.F.P.A.) with the official endorsement of the Washington State Firemen's Association. This is a very useful and informative booklet of 121 pages. Members of the Volunteer Firemen's Section may obtain copies at one dollar each by applying to Chief Rogers in care of the Fire Department, Seattle, Wash.

Fire Prevention Week Campaign Material The back page lists posters, leaflets and pamphlets for use in Fire Prevention Week campaigns. Every now and then someone expresses surprise that we should have to charge for such material. They have in mind usually the practices of subsidized trade associations in other fields and misunderstand our position. The N.F.P.A. is a self-supporting organization dependent on the dues of members, so we obviously have no funds for free distribution of printed material in large quantities.

The N.F.P.A. can, however, print such campaign material in large quantities and furnish it to members and others at low cost, much less than it would cost if prepared locally in small quantities. This is one special service of the N.F.P.A., and fire departments and fire prevention committees may feel free to order a sufficient supply to put on an effective local campaign.

New Members During August The fact that applications for members have continued to come in during the hot weather and vacation period of the summer points to a further rapid upward trend in the membership of the Volunteer Firemen's Section this fall. The following volunteer fire companies or departments with 207 men have joined the section since the last issue of VOLUNTEER FIREMEN, making a total membership of 6,403 to date.

Brawley Firemen's Association, Brawley, California.

Moscow Volunteer Fire Department, Moscow, Idaho.

Welsh Volunteer Fire Department, Welsh, Louisiana.

Milltown Fire Department, Milltown, New Jersey.

Pittsburgh Plate Glass Company Fire Brigade, Newark, New Jersey.

Lexington Fire Department, Lexington, North Carolina.

Fame Fire Company No. 2, Lewistown, Pennsylvania.

Empire Hook and Ladder Company, Pottstown, Pennsylvania.

Redfield Fire Department, Redfield, South Dakota.

Charlottetown Fire Department, Charlottetown, Prince Edward Island, Canada.

Pyrene Prize Letter Contest

This Month's Awards for Best Letters on Fires Put Out with Fire Extinguishers

First Prize—$10.00

G. H. NEFF, Chief,
Volunteer Fire Dept., Grafton, Ill.

Fire Extinguishers Save 18 Machines

"On May 12 we were called to a road construction camp two miles outside the city. It was impossible to take our pumper over the newly graded road so we responded in a light roadster with three 2½-gallon foam tanks and two 1½-quart carbon tetrachloride extinguishers.

"An excavator and two caterpillar tractors in a group of 15 similar pieces were blazing furiously, the fire being fed by accumulated grease on the equipment and gasoline from ruptured tanks on the two 'cats.' Intense heat drove back the laborers who attempted to throw dirt on the blaze. By concentrating the three foam streams on the 'cats' and the two carbon tetrachlorides on the excavator we subdued the flames, reducing a probable $15,000 loss to less than $2,000."

Second Prize—$3.00

JOHN T. LAMPLUGH, Deputy Chief,
Linwood Fire Dept., Linwood, Pa.

Ambulance and Explosives Saved

"From a powder works in Delaware, a call came in for the ambulance housed in a building with four other vehicles. The driver, in his haste to respond, choked the motor and it back-fired, causing the excess gasoline to flare up. The driver grabbed the 1-quart carbon tetrachloride on the ambulance and sprayed the base of the fire, but the flames had gained such headway that it was impossible to extinguish them with this gun, although it did knock down the fire considerably. My friend, who witnessed the fire, grabbed a 2½-gallon soda-acid extinguisher and finished the fire. The ambulance made its run and the fire was kept from thousands of pounds of powder near by."

Third Prize—$2.00

HAROLD RILEY,
Volunteer Fire Dept., Albany, Calif.

Saves Chemical Laboratory

"A friend and I noticed smoke rolling from a window in a chemistry laboratory. As we reached the building, the owner opened the door, disclosing a fire burning briskly in some electrical apparatus. Grabbing a garden hose, I was about to turn it on the fire when the owner pleaded with me not to, as the specimens and apparatus were quite valuable and the water would ruin them.

"My friend, an older volunteer than myself, got a 1-quart carbon tetrachloride extinguisher from his machine and extinguished the fire, which was still gaining headway. He then explained to the owner and me that carbon tetrachloride was a nonconductor of electricity and did no damage. The owner later purchased several of these extinguishers."

Honorable Mention

E. E. HOFFMAN,
Volunteer Fire Dept., Whitefish, Mont.

W. J. HARBICHT,
Volunteer Fire Dept., Rosetown, Sask., Canada

CARL IRWIN,
Hose Co. No. 4, Harrisonburg, Va.

SEND us your story of how an approved fire extinguisher of any make has been used to save life or property and get in line for an award next month for one of the cash prizes being offered in this contest co-operatively by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN. Until further notice the following cash prizes will be awarded each month: First Prize, $10.00; Second Prize, $3.00; Third Prize, $2.00. The contest will be judged by the engineering staff of the National Fire Protection Association and the editors of VOLUNTEER FIREMEN.

CONTEST RULES

1. Only members of a volunteer fire department may compete in the Pyrene Prize Letter Contest.
2. Letters are to describe actual experiences where any approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experiences.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 20th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letter to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

MEMBERSHIP PLAN

Volunteer Firemen's Section National Fire Protection Association

WHERE twenty or more firemen in a volunteer company or department affiliate with the Volunteer Firemen's Section the cost is 50 cents a year *per man*. Each fireman will receive one copy of VOLUNTEER FIREMEN, the monthly journal of the Volunteer Firemen's Section, mailed regularly to his home address. The company or department automatically becomes a member of the National Fire Protection Association and is entitled to full privileges of membership. All the literature regularly issued to N.F.P.A. members is mailed to headquarters of the company or department.

Membership may be applied for by one member of the company or department collecting 50 cents for each of the 20 or more members and making a single remittance for the group, or the company or department may take a membership for its men and make a single remittance from the company or department treasury.

Companies of Less Than Twenty

Because of the large amount of material mailed to members, not less than $10.00 can be accepted from any company or department for membership dues. In the case of companies or departments with less than twenty men this means that the cost divided among them will be slightly higher per man. Of course, some such companies or departments may prefer to make a single remittance of $10.00 from the company or department treasury. In other cases a few interested citizens, not members of the company or department, may be glad to contribute 50 cents apiece to make up the required minimum of twenty, so that the members may secure the rate of 50 cents per man.

These companies or departments have full privileges of N.F.P.A. membership as above, and each member receives the monthly magazine, VOLUNTEER FIREMEN, at his home.

ONE PUFF SMOTHERS AUTOMOBILE FIRES

"WE put out five automobile fires with it in three days without recharge," says a Long Island Fire Chief. "We used it successfully against fire on a road tractor that had gasoline pouring from its tank and I don't believe anything else would have done the job," reports a prominent Massachusetts Chief. An Illinois Chief says, "There is nothing quicker for automobile fires and nothing as clean to use." That, briefly, is what a few Fire Chiefs say about LUX Extinguishers.

The LUX Extinguisher puts out fires by smothering them under a heavy blanket of carbon dioxide (CO_2) gas. It snuffs out fires in gasoline, oil or lacquer burning on a surface instantly. It puts out fires in gasoline pouring from a leaking tank against which foam and carbon tetrachloride fail. It puts out fires in live electrical equipment safely. No other type of extinguisher is effective against all of these different fires.

May we send you a free folder, giving complete information on the LUX Extinguisher?

KILLS RUNNING GASOLINE FIRES

WALTER KIDDE & COMPANY, INC.
BLOOMFIELD . . . NEW JERSEY

Over 500 Fire Departments use LUX Extinguishers on Pumpers, Ladder Trucks and Chemical Engines.

Technical Correspondence

Answered by **Robert S. Moulton,** *Technical Secretary*

National Fire Protection Association,
60 Batterymarch St.,
Boston, Mass.

Gentlemen:

Mr. Stephen Klocek, the Assistant Fire Chief of our city, called to my attention the N.F.P.A. publication service on the back page of the VOLUNTEER FIREMEN for August, 1934.

At the present time we are faced with a problem of the storage of gasoline within our city limits. I am enclosing fifteen cents herewith and ask that you send to me publication No. B-4, "Suggested Ordinance on Flammable Liquids."

Our situation is that a large gasoline company has a storage plant in the residential section of our city adjoining the railroad line through the city. This company in 1922 was given a permit to store gasoline on these premises, specifying that the tanks be properly diked with sod and be properly ventilated.

Since the large fire in the near-by city of Jamestown, the residents in that section have asked the city to compel the removal of these tanks. In view of the fact that twelve years ago the city council gave them permission to store gasoline in the manner above set out, we are faced with a proposition of determining whether this is a dangerous way to store gasoline.

If you have any further pamphlets or reports that would aid us in this determination, I wish you would kindly send them on to me and I will pay the costs of the same. The sooner this information is received, the more it will be appreciated, as the assistant fire chief must make a report with recommendations for the next council meeting.

Very truly yours,
ALBERT J. FOLEY,
City Attorney,
Dunkirk, N. Y.

Answer. As requested in your letter of August 16, we are glad to send you a copy of our Suggested Ordinance on Flammable Liquids. We are also sending you a pamphlet entitled "Municipal Regulation of Oil Storage" which discusses the hazards involved and may be useful to you in your consideration of this subject.

If the provisions of this ordinance are strictly complied with, the hazard will be reduced to a minimum. It would be impossible to assure 100 per cent safety from fire where any combustible material is stored or handled, and our ordinance does not attempt to do this but merely to reduce the hazard to a reasonable minimum consistent with public safety.

An analysis of the fire in Jamestown to which you refer shows that its seriousness, if not its origin, was directly associated with features not in accordance with our suggested ordinance. Specifically, the size of the vents was only a small fraction of the figure given in the ordinance and electrical equipment was unsuitable.

I fully realize that there is probably an insistent demand for the elimination of this oil property from the district in question. However, unless the hazard is particularly acute, it seems unreasonable to require the removal of tanks which have been used in this location for a dozen years. I would suggest that it would be more reasonable to have the plant carefully inspected and secure the co-operation of the oil company in installing vents of adequate size, erecting suitable dikes where required, and correcting any other details of the installation which may require attention.

NOTE:

The Jamestown Gasoline Storage Plant Fire in which four firemen and three spectators lost their lives, referred to by our correspondent, was described in the August issue of VOLUNTEER FIREMEN. Single copies of the Suggested Ordinance on Flammable Liquids will be sent for 15 cents on request to the N.F.P.A. Executive Office, 60 Batterymarch St., Boston, Mass. The profusely illustrated pamphlet "The Municipal Regulation of Oil Storage" may be obtained on request for 20 cents a copy.

Lightning Rods Make Buildings 32 Times Safer

The effectiveness of lightning conductors in reducing losses from lightning is indicated by the reports of a number of fire marshals and insurance companies in the United States and Canada in which the losses on protected and unprotected buildings have been separated. The reports generally state that nearly all of the fire loss from lightning occurs in rural districts. The proportion of farm buildings equipped with lightning rods is not known except in Iowa, where a careful estimate indicated about fifty per cent. In the last five years, in this state, 17 rodded buildings were destroyed by lightning, the loss amounting to $49,366. In the same period 538 other buildings not rodded were destroyed, the loss amounting to $1,081,578. The value of rodded buildings lost was only 4.4% of the total, although the number exposed was about 50%. The condition prevailing in other midwestern states is not much different. Over large parts of Minnesota, Kansas, Missouri, Illinois, Wisconsin, Ohio, Indiana and Michigan, installations are numerous, and it seems probable that about half of the farm buildings in this entire area, at least of the better class, are protected.

In making reports a building equipped with rods is listed as "rodded" regardless of the condition of the installation. There are many defective installations, and fire marshals are unanimous in their opinion that these contribute in large measure to the losses in rodded buildings. However, without reference to the condition of the protective equipment, and estimating as many protected as unprotected farm buildings, the State of Iowa in the five-year period 1929-1933 had 32 buildings "not rodded" destroyed for every rodded building destroyed by lightning. In a larger area during a previous period, this ratio was 57. It is quite evident that the chance of an unprotected farm building being destroyed is many times as great as that of a rodded building.

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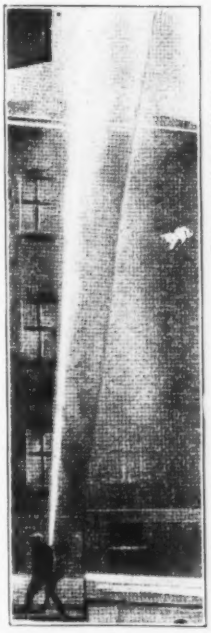

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If you are not satisfied we would rather cheerfully take the pump back than take your money.

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EVERYTHING AND THE BEST IN FIRE DEPARTMENT EQUIPMENT

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Campaign Material for Fire Prevention Week

October 7-13 1934

The N.P.F.A. would like to make a general free distribution of this literature, but its limited finances do not permit this and charges must be made to cover the cost of quantity distribution as is indicated below:

Poster. (FPW 1) A striking two-color Fire Prevention Week Poster, 12 x 16 in.—"Now War on Fire." *Sample copies free, $1.00 per hundred, $7.50 per thousand.*

The panel at the bottom of this poster may be used for local imprinting if desired. Imprinting may be done by the purchaser or will be done by the N.F.P.A. (subject to delays incident to such extra printing) at the following prices: one thousand or less $2.50; each additional thousand $1.00.

A special edition of the poster, printed on substantial cardboard, will be supplied instead of the paper poster on request, at $3.00 per hundred, $25.00 per thousand.

"CRUSH YOUR CIGARETTE" is another two-color poster (same size and price as above) suitable for use in connection with Fire Prevention Week. *Sample free on request.*

Leaflet (FPW 2) A striking leaflet, in red and black, 6 x 9 in., telling the story of Fire Prevention Week in condensed form, and giving the essential rules for fire safety. Intended for public distribution in schools, etc. *Sample copies free, 50 cents per hundred, $3.50 per thousand.*

Fire Prevention Week Handbook. (FPW 3) This is the sixth edition of a fifty-page illustrated handbook going into all phases of Fire Prevention Week and Clean-Up Campaigns. It is intended primarily for the guidance of committees and others planning Fire Prevention Week. It is also valuable to teachers and school superintendents interested in school fire prevention exercises. *Price 15c. per copy, $10.00 per hundred.*

Facts About Fire. (FPW 4) A 1934 16-page Supplement to the Fire Prevention Week Handbook. This pamphlet contains material valuable for preparation of speeches, newspaper publicity and radio broadcasts. *Price 5c. per copy, $3.00 per hundred.*

Fire Prevention Exhibits. (FPW 5) A 16-page pamphlet reproducing 22 photographs of successful state and county fire exhibits, window displays and other exhibits used to dramatize fire prevention. *Price 10c. per copy, $7.50 per hundred.*

Keep Your Home from Burning. (FPW 6) A two-color folder designed for general distribution to homes. The last page is left blank for special imprinting if desired. *Sample copies free, $1.50 per hundred, $7.50 per thousand. (Imprinting extra if desired.)*

All the above prices are F. O. B. Boston. Orders will be shipped express collect unless other shipping instructions are received. Single copies and small orders will be sent parcel post prepaid. Designating numbers in parentheses after each title above are for convenience in ordering by telegram.

All those desiring to secure supplies of posters, handbooks, etc., are urged to order them promptly in order that there will be no delays in shipment. Last minute orders are often subject to annoying transportation delays.

For the above material as well as for general information on fire prevention apply to

NATIONAL FIRE PROTECTION ASSOCIATION
60 Batterymarch Street
Boston, Mass., U.S.A.

Printed in U. S. A.